

ABSTRACT OF THE DISCLOSURE

The present invention provides a substrate processing apparatus and a substrate processing method
5 suitable for use in an etching apparatus which etches a thin film formed on a peripheral portion of a substrate. The present invention also provides a substrate processing apparatus and a substrate processing method suitable for use in a cleaning apparatus which performs a cleaning process on
10 a substrate which has been etched. The substrate processing apparatus for use in etching includes a substrate holder for holding a substrate substantially horizontally and rotating the substrate, and a processing liquid supply unit for supplying a processing liquid onto a peripheral portion
15 of the substrate which is being rotated in such a manner that the processing liquid is stationary with respect to the substrate. The substrate processing apparatus for use in cleaning a substrate includes a substrate holder for holding a substrate substantially horizontally and rotating
20 the substrate, and a cleaning liquid supply unit having a cleaning liquid outlet which is oriented from a center of the substrate toward a peripheral portion of the substrate with an elevation angle of not more than 45° from a surface of the substrate. The cleaning liquid supply unit supplies
25 a cleaning liquid to the surface of the substrate at a flow velocity of not less than 0.1 m/s.